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Research Article

New and interesting spiders (Arachnida, Araneae) from Vashlovani National Park and Chachuna Managed Reserve (Georgia)

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Abstract

Spiders collected individually between 19–23 May 2024 during a trip to Vashlovani National Park and Chachuna Managed Reserve were determined, resulting in 24 species, of which two species are described as new: *Synema inexpectata* **sp. nov.** (Thomisidae) and *Prodidomus trihelicoides* **sp. nov.** (Prodidomidae). Ten species - *Acanthinozodium parysatis* Zamani & Marusik, 2021 (Zodariidae), *Berlandina nabozhenkoi* Ponomarev & Tsvetkov, 2006, *Cryptodrassus helvolus* (O. Pickard-Cambridge, 1872), *Synaphosus palearcticus* Ovtsharenko, Levy & Platnick, 1994, *Synaphosus turanicus* Ovtsharenko, Levy & Platnick, 1994, *Talanites involutus* (O. Pickard-Cambridge, 1885), *Turkozelotes attavirus* Chatzaki, 2019 (all Gnaphosidae), *Evarcha armeniaca* Logunov, 1999 (Salticidae), *Lycosa soboutii* Shafaie, Nadolny & Mirshamsi, 2022 (Lycosidae), *Rhysodromus rikhteri* (Logunov & Huseynov, 2008) (Philodromidae), and *Sardinidion blackwalli* (O. Pickard-Cambridge, 1871) (Theridiidae) are recorded in Georgia for the first time, of which six species and three genera are new to the Caucasus region. The male of *L. soboutii* is described for the first time. Diagnostic drawings of preserved specimens and first photos of several preserved and alive species are provided along with the detailed collecting data.

Key words: Arthropoda, biodiversity, new records, new species, South Caucasus, taxonomy

Introduction

Nestled in the extreme southeast of Georgia, the Vashlovani National Park (hereafter Vashlovani NP) presents a remarkable example of geographical and biological diversity. Covering approximately 35,000 hectares, it features a mosaic of landforms, including expansive steppes, rugged semideserts, imposing badlands, sinuous river valleys, and sporadic pockets of vegetation, such as dry open woodlands of mastic (*Pistacia mutica*) and juniper species (*Juniperus* spp.) (Lachashvili et al. 2004). The varied topography of Vashlovani NP, ranging from flat expanses to undulating terrains, creates a dynamic spatial composi-

tion. It experiences a continental climate characterized by scorching summers and temperate winters, further enriching its ecological complexity.

This habitat supports a rich array of wildlife, harboring endangered species such as the Caucasian leopard (*Panthera pardus tulliana*), Eurasian lynx (*Lynx lynx*), and goitered gazelle (*Gazella subgutturosa*). The biodiversity of Vashlovani NP underscores its pivotal role in conservation initiatives and ecological research. As a microcosm of natural systems, it offers a unique opportunity for scientific inquiry and conservation efforts, providing a valuable context to explore the intricate interplay between geological formations, climatic conditions, and biological diversity. The same refers to the Chachuna Managed Reserve (hereafter Chachuna MR) bordering Vashlovani NP from the south-west.

Despite all these, until recently, the history of spider research in the specified territories was abysmal and included only three species: *Eresus kollari* Rossi, 1846, *Orthobula charitonovi* (Mikhailov, 1986), and *Neon rayi* (Simon, 1875) (Otto 2022). Within a couple of expeditions organized in April 2022–2023 as part of the CaBOL (Caucasus Barcode of Life) project, an additional 38 species were recorded, of which 25 species and one family (Palpimanidae) were discovered in Georgia for the first time, while six species were new to the Caucasus region (Seropian et al. 2023, 2024). The latest trip to Vashlovani NP and Chachuna MR held on 19–23 May 2024 resulted in finds of even more new and interesting species. The main goals of this study are as follows: (1) to describe the new species, (2) to provide new country and regional records, and (3) to present the species list from the studied territories.

Materials and methods

Most samples were collected individually during a four-day trip to Vashlovani NP and Chachuna MR. Additional material was collected within short-term individual trips to Gori and Kumisi Lake. Sampling details are given below. The elevations and GPS coordinates (given in WGS84) were obtained via Garmin GPS MAP 64s. Collected specimens were then preserved in 96% ethanol and stored in a freezer at -22˚C at the scientific collections of Ilia State University (Georgia, Tbilisi).

Identification was made using literature sources on Caucasian spiders (see list in Otto 2022), Nentwig et al. (2024), and sources listed therein. Specimen were identified with a Zeiss Stemi 508 Stereo Microscope with 8:1 Zoom and a Zeiss Apo 1.5x FWD 53 mm front lens attached. Drawings were made by the corresponding author based on microscope photographs using a Wacom CTH-690 Intuos Medium Pen and Touch Tablet with the programs Krita (version 2.9.7) and Photoshop CS6 (version 13.0). Drawings usually show the left male palp, the epigyne, and the endogyne; perspective and scale bars are given in the plates and their captions. Epigyne and endogyne were prepared using a 30% potassium hydroxide (KOH) solution. Leg measurements are given as follows: Femur (Fe) + Patella (Pa) + Tibia (Ti) + Metatarsus (Mt) + Tarsus (Ta). All measurements are given in millimeters. Photos of live and preserved specimens were taken with a Canon EOS 90D camera equipped with a Canon EF 60 mm f/2.8 Macro USM lens and a Canon Macro Twin Lite MT-26EX-RT. Digital images

were then prepared using Zerene Stacker image stacking software and Adobe Photoshop CS6 (version 13.0).

Abbreviations

ALE – anterior lateral eyes;
AME – anterior median eyes;
PLE – posterior lateral eyes;
PME – posterior median eyes;
RTA – retrolateral tibial apophysis;
Tr – trochanter;
Fe – femur;
Pa – patella;
Ti – tibia;
Mt – metatarsus;
Ta – tarsus;
ISU – Ilia State University, Tbilisi;
mun – municipality.

Results

In total, 53 spiders, including 19 males, 33 females, and 1 juvenile, collected during the sampling period were examined, comprising 24 species from 22 genera and 12 families. The list of all the recorded taxa is arranged alphabetically in the following section. Species marked with an asterisk (*) are reported from Georgia for the first time, while those marked with a double asterisk (**) represent the new records in the Caucasus region.

List of species

Family Dictynidae O. Pickard-Cambridge, 1871

Genus *Brigittea* (Lucas, 1848)

Comments. *Brigittea* is a small genus of five valid species distributed in the Western Palaearctic (with *B. civica* (Lucas, 1848) introduced to South Africa), most of which were previously classified under *Dictyna* Sundevall, 1833 (WSC 2024). Males of this genus are characterized by a highly elevated cephalic region and chelicerae with lateral condyles and deeply concaved mesal margins. Females differ from those of related genera by spaced receptacles (vs. contiguous). Two species have been recorded in the Caucasus and Georgia.

Brigittea innocens (O. Pickard-Cambridge, 1872)

Brigittea innocens: Lecigne 2021: 13, figs 4a–i, 5a–h, 6a–e (♂♀)

Material examined. GEORGIA • 1♂, 1♀; Kakheti, Dedoplistskaro mun., Chachuna MR, Dalis Mta Reservoir; N41.2804°, E45.8968°; semidesert, *Tamarix* sp.; leg. Seropian A; 19 May 2024; CaBOL-IDs 1037662, 1038175.

Comments. This species is distributed from the eastern Mediterranean to eastern Kazakhstan (Nentwig et al. 2024; WSC 2024). Recently it was recorded for the first time in Georgia and the Caucasus region based on a couple of females from another locality from the Chachuna MR (Seropian et al. 2024).

***Brigittea latens* (Fabricius, 1775)**

Brigittea latens: Marusik et al. 2015: 136, figs 31–36, 40–42 (♂)

Material examined. GEORGIA • 1♂; Kakheti, Dedoplistskaro mun., Chachuna MR, Dalis Mta Reservoir; N41.2804°, E45.8968°; semidesert, *Tamarix* sp.; leg. Seropian A; 19 May 2024; CaBOL-ID 1038114.

Comments. This species is distributed from the Iberian Peninsula east to eastern Kazakhstan and north to Steinkjer (Norway) (WSC 2024). Previous records of this widespread species in Georgia were from the Samachablo region (Ponomarev and Komarov 2015), Kumisi, and Vashlovani NP (Seropian et al. 2023). It is the first record of *B. latens* from the Chachuna MR.

Family Eresidae C. L. Koch, 1845

Genus *Stegodyphus* Simon, 1873

Comments. *Stegodyphus* is the second-largest genus of velvet spiders, with 20 valid species mainly diversified in Africa (WSC 2024) and differing from other related genera by the long, acute clypeal hood and arboreal lifestyle (vs. subterranean). A single species, *S. lineatus* (Latreille, 1817), recorded in the Caucasus, was recently discovered in Georgia.

***Stegodyphus lineatus* (Latreille, 1817)**

Stegodyphus lineatus: Seropian et al. 2023: 238, figs 12–13 (♂)

Material examined. GEORGIA • 2♂♂; Kakheti, Dedoplistskaro mun., Chachuna MR, Osiaskheoba; N41.2314°, E46.1473°; semidesert, on vegetation; leg. Seropian A; 19 May 2024; CaBOL-IDs 1038105, 1038146.

Comments. A recent record of this species in Georgia was based on a couple of males from Mijniskure (Vashlovani NP) (Seropian et al. 2023). It is the first record of *S. lineatus* in the Chachuna MR.

Family Gnaphosidae Banks, 1892

***Genus *Berlandina* Dalmas, 1922**

Comments. Berlandina is a relatively large genus in the subfamily Gnaphosinae with 41 valid species distributed in the Middle East, Caucasus, Mediterranean, East Asia, and West and East Africa (WSC 2024). Four species, namely *B. caspica* Ponomarev, 1979, *B. charitonovi* (Ponomarev, 1979), *B. nabozhenkoi* Ponomarev & Tsvetkov, 2006, and *B. saraevi* Ponomarev, 2008, have been recorded in the Caucasus, with none of them known from Georgia.

*_Berlandina nabozhenkoi_ Ponomarev & Tsvetkov, 2006

Figs 1–2

Berlandina nabozhenkoi Ponomarev et al. 2018: 246, figs 1–2 (♀).

Material examined. GEORGIA • 2♀♀; Kakheti, Dedoplistskaro mun., Chachuna MR, Dalis Mta Reservoir; N41.2804°, E45.8968°; semidesert, under rocks; leg. Seropian A; 19 May 2024; CaBOL-IDs 1037707, 1037708.

Comments. This species is distributed from Turkey east to Iran and north to the Astrakhan Oblast of Russia (Nentwig et al. 2024; WSC 2024). From the Caucasus, it was previously recorded in Dagestan (Ponomarev and Abdurakhmanov 2014). It is the first record of *Berlandina* in Georgia.

*Genus *Cryptodrassus* Miller, 1943

Comments. *Cryptodrassus* is a small genus of small spiders with 11 accepted species distributed in the Palaearctic and India (WSC 2024). Males of this genus differ from those from closely related *Synaphosus* Platnick & Shadab, 1980 by a lack of translucent flange on the male palp and smaller embolus, while females have less coiled insemination ducts. Until recently, a single species, *C. hungaricus* (Balogh, 1935), has been recorded in the Caucasus (North Ossetia) (Ponomarev et al. 2021).

*_Cryptodrassus helvolus_ (O. Pickard-Cambridge, 1872)

Figs 3–4

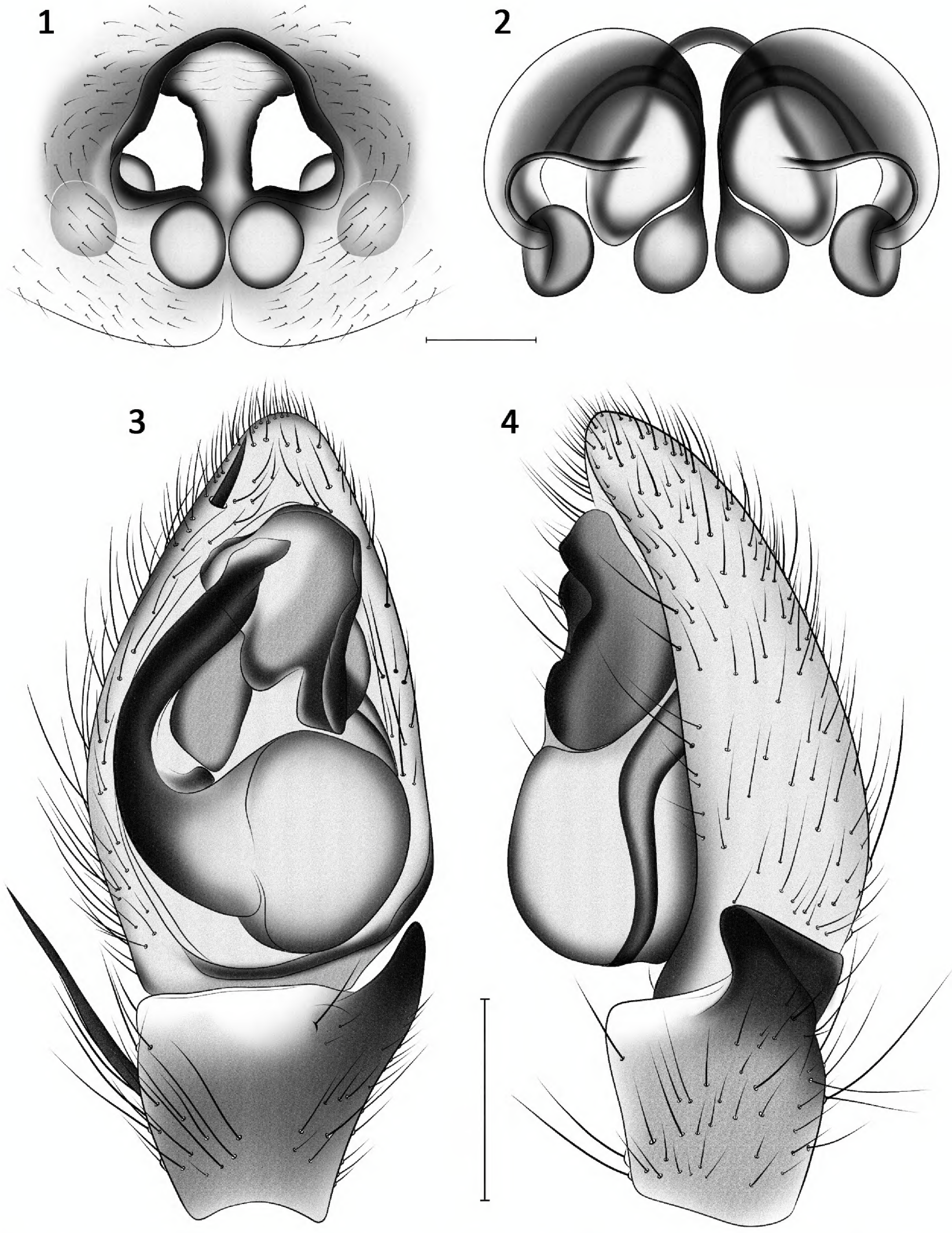
Zelotes helvolus: Levy 1998: 148, figs 120–122 (♀).
Zelotes helvolus: Ponomarev et al. 2017: 110, figs 9–10 (♀).

Material examined. GEORGIA • 1♂; Kakheti, Dedoplistskaro mun., Chachuna MR, Dalis Mta Reservoir; N41.2804°, E45.8968°; semidesert, under rocks; leg. Seropian A; 19 May 2024; CaBOL-ID 1037661.

Comments. This species is distributed from Cyprus north to Stavropol Kray of Russia, east to Kazakhstan, and south to Iraq and Iran (Nentwig et al. 2024; WSC 2024). Recently it was recorded in Azerbaijan (Nuruyeva and Snegovaya 2024). It is the first record of *C. helvolus* in Georgia.

*Genus *Marinarozelotes* Ponomarev, 2020

Comments. *Marinarozelotes* is a genus of small to medium-sized (2–12 mm) Zelotinae spiders with 23 accepted species distributed in the Palaearctic (WSC 2024), most of which were previously classified under *Zelotes* and *Trachyzelotes*. Males of this genus differ from other Zelotinae by a large distally



Figures 1–4. *Berlandina nabozhenkoi*, female (**1**: epigyne, ventral view; **2**: endogyne, dorsal view). *Cryptodrassus helvolus*, male (**3**: left palp, ventral view; **4**: ditto, retrolateral view). Scale bars: 0.2 mm..

rounded base of the loop-like embolus and obliquely oriented or distally rounded terminal apophysis. Females are characterized by an M-shaped median epigynal ridge. Seven species occur in the Caucasus, including *M. adriaticus* (Caporiacco, 1951), *M. barbatus* (L. Koch, 1866), *M. cumensis* (Ponomarev, 1979), *M. jaxartensis* (Kroneberg, 1875), *M. malkini* (Platnick & Murphy, 1984), *M. manytchensis* (Ponomarev & Tsvetkov, 2006), and *M. ponticus* Ponomarev, 2022 (Otto 2022; WSC 2024).

***Marinarozelotes jaxartensis* (Kroneberg, 1875)**
Figs 5–6

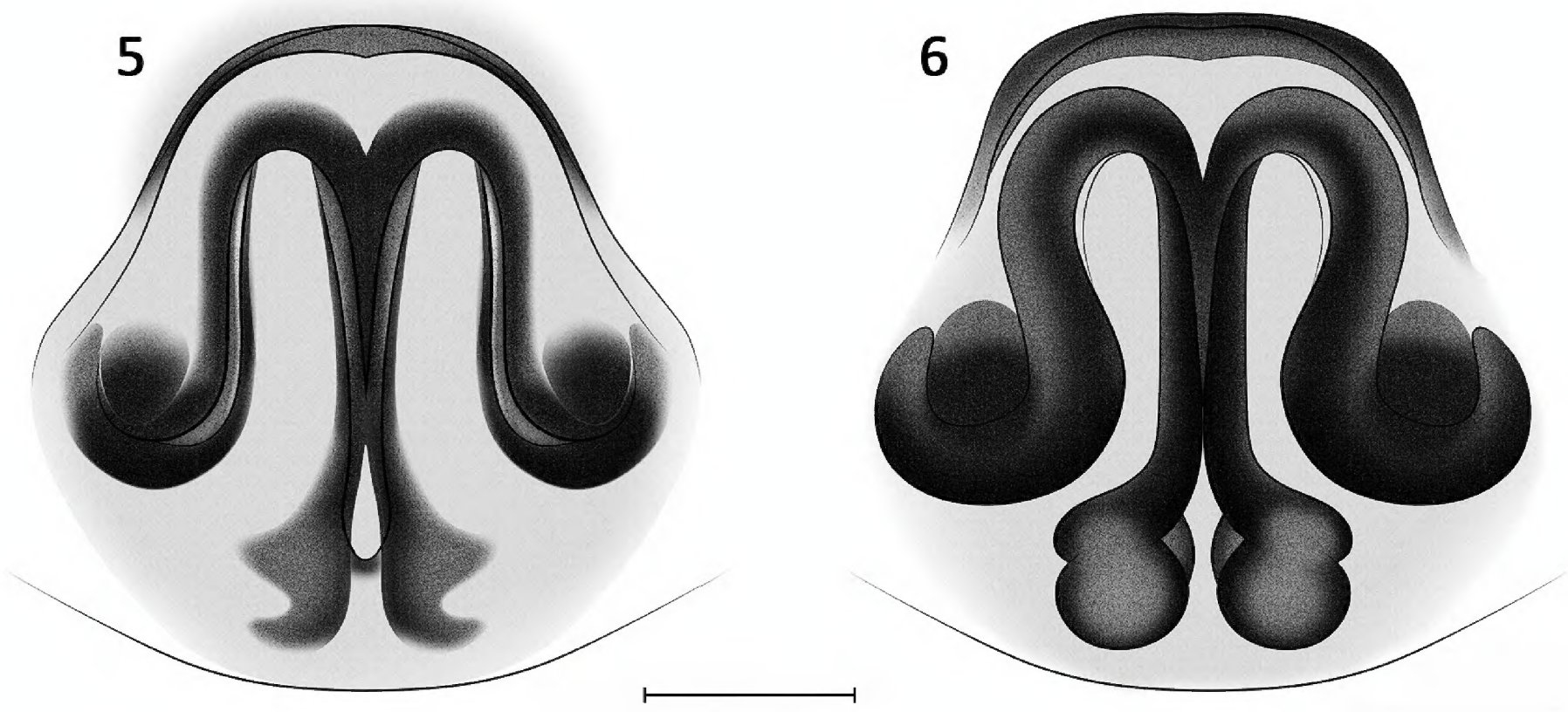
Marinarozelotes jaxartensis: Ponomarev and Shmatko 2020: 135, figs 7–8, 11, 30, 37–38 (♀♂)

Material examined. GEORGIA • 4♀♀, 1♂; Kakheti, Dedoplistskaro mun., Chachuna MR; Osiaskheoba; N41.2314°, E46.1473°; semidesert, under rocks and soil crevices; leg. Bulbulashvili N, Makharadze G; 19 May 2024; CaBOL-IDs 1037660, 1037394, 1037395, 1037870, 1037396. • 2♀♀; Kakheti, Vashlovani NP; Mijniskure; N41.1245°, E46.6456°; semidesert, under rocks; leg. Makharadze G; 22 May 2024; CaBOL-IDs 1038113, 1038156.

Comments. This species is distributed from North Africa to the Caucasus (Azerbaijan, Dagestan), Iran, Russia (Europe), and Central Asia. Introduced to Hawaii, USA, Mexico, South Africa, India, China, and Japan. (Nentwig et al. 2024; WSC2024). It is the first record of *M. jaxartensis* in Georgia. After thoroughly checking Ponomarev and Shmatko (2020), we did not find any mention of previous records of this species from the territory of Georgia, despite the indications in Nentwig et al. (2024).

Genus *Nomisia* Dalmas, 1921

Comments. *Nomisia* is a relatively large genus with 39 currently recognized species mainly distributed in temperate and subtropical regions of the Palaearctic (WSC 2024). Four species occur in the Caucasus, namely *N. aussereri* (L. Koch, 1872), *N. conigera* (Spassky, 1941), *N. exornata* (C. L. Koch, 1839), and *N. ripariensis* (O. P.-Cambridge, 1872) (Otto 2022; WSC 2024). The record of *N. molendinaria* (L. Koch, 1866) in Georgia needs to be verified.



Figures 5–6. *Marinarozelotes jaxartensis*, female (**5**: epigyne, ventral view; **6**: endogyne, dorsal view). Scale bar: 0.2 mm.

***Nomisia ripariensis* (O. Pickard-Cambridge, 1872)**

Nomisia ripariensis: Levy 1995: 931, fig. 29–30 (♀).

Material examined. GEORGIA • 1♀; Kakheti, Dedoplistskaro mun., Chachuna MR, Dalis Mta Reservoir; N41.2804°, E45.8968°; semidesert, under rocks; leg. Makharadze G; 19 May 2024; CaBOL-ID 1037388.

Comments. This species is distributed from the eastern Mediterranean north to Dagestan and east to Iran (Nentwig et al. 2024; WSC 2024) and was recently recorded in Georgia from Vashlovani NP and Shulaveri (Seropian et al. 2023). It is the first record of *N. ripariensis* from the Chachuna MR.

***Genus *Synaphosus* Platnick & Shadab, 1980**

Comments. *Synaphosus* is a relatively large genus of small spiders, with 36 accepted species mainly distributed in the Palaearctic (WSC 2024). Males of this genus differ from those of the closely related *Cryptodrassus* Miller, 1943, by the presence of a translucent flange on the male palp and larger embolus, while females have strongly coiled insemination ducts. Until recently, a single species, *S. palearcticus* Ovtsharenko, Levy & Platnick, 1994, was recorded in the Caucasus (Armenia, Azerbaijan) (Otto 2022).

****Synaphosus palearcticus* Ovtsharenko, Levy & Platnick, 1994**
Figs 7–10

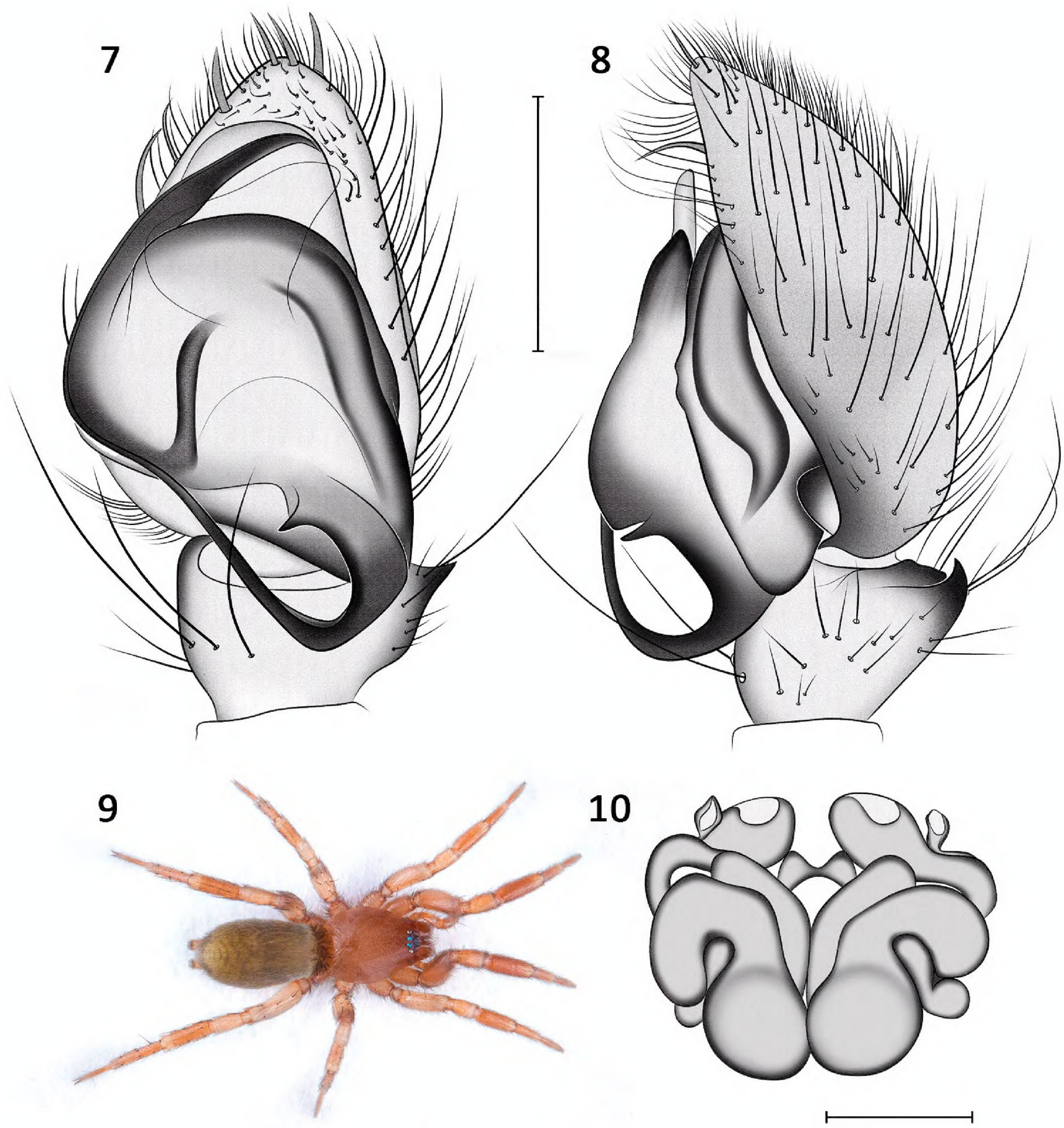
Synaphosus palearcticus: Ovtsharenko et al. 1994: 6, figs 3–5, 21–29 (♂♀).
Synaphosus palearcticus: Marusik and Fomichev 2016: 437, figs 4, 28–30, 36–42 (♂♀).

Material examined. GEORGIA • 1♂, 1♀; Kakheti, Dedoplistskaro mun., Chachuna MR, Dalis Mta Reservoir; N41.2804°, E45.8968°; semidesert, under rocks; leg. Seropian A; 19 May 2024; CaBOL-IDs 1037705, 1038162. • 1♀, 1♂, 1juv.; Shida Kartli, Gori, Kvernaki ridge; N41.9926°, E44.1330°; heathland, under rocks; leg. Seropian A; 31 Mar. 2024; CaBOL-IDs 1037287, 1037285, 1037680.

Comments. This species is distributed from Crete to Kazakhstan (Nentwig et al. 2024; WSC 2024). In the Caucasus, it was previously recorded in Armenia and Azerbaijan (Otto 2022). It is the first record of *Synaphosus* Platnick & Shadab, 1980 in Georgia.

*****Synaphosus turanicus* Ovtsharenko, Levy & Platnick, 1994**
Figs 11–12

Synaphosus turanicus: Ovtsharenko et al. 1994: 8, figs 61–62 (♀).
Synaphosus turanicus: Marusik and Fomichev 2016: 438, figs 31–33 (♀).



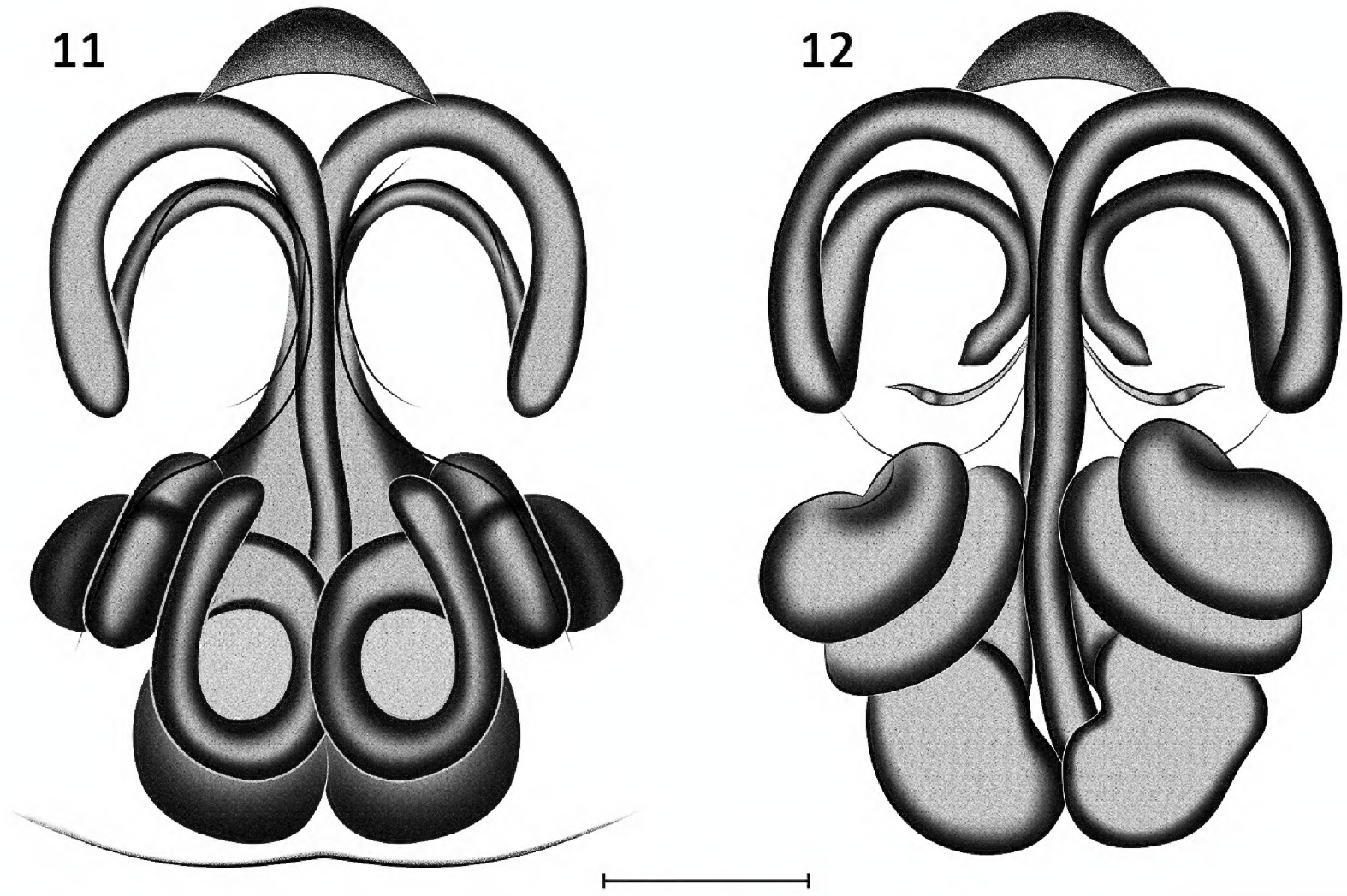
Figures 7–10. *Synaphosus palearcticus* (**7**: male, left palp, ventral view; **8**: ditto, retrolateral view; **9**: female, habitus of live specimen from Gori; **10**: endogyne, dorsal view). Scale bars: 0.2 mm (7– 8); 0.1 mm (10).

Material examined. GEORGIA • 1♀; Kakheti, Vashlovani NP; Mijniskure; N41.1245°, E46.6456°; semidesert, under rocks; leg. Makharadze G; 22 May 2024; CaBOL-ID 1037406.

Comments. This species was previously known from Central Asia only (Nentwig et al. 2024; WSC 2024). It is the first record of *S. turanicus* in the Caucasus.

Genus *Talanites* Simon, 1893

Comments. *Talanites* is a relatively small genus with 19 recognized species mainly distributed in temperate regions of the Holarctic (WSC 2024). Four spe-



Figures 11–12. *Synaphosus turanicus*, female (**11**: epigyne, ventral view; **12**: endogyne, dorsal view). Scale bar: 0.1 mm.

cies were recorded in the Caucasus, namely *T. atscharicus* Mcheidze, 1946; *T. dunini* Platnick & Ovtsharenko, 1991; *T. involutus* (O. Pickard-Cambridge, 1885); and *T. thorelli* Ponomarev, 2020 (WSC 2024).

******Talanites involutus* **(O. Pickard-Cambridge, 1885)**
Figs 13–15

Talanites fagei: Platnick and Ovtsharenko 1991: 118, figs 9–10 (♂).
Talanites involutus: Yang et al. 2023: 28, figs 3A–C (♂).

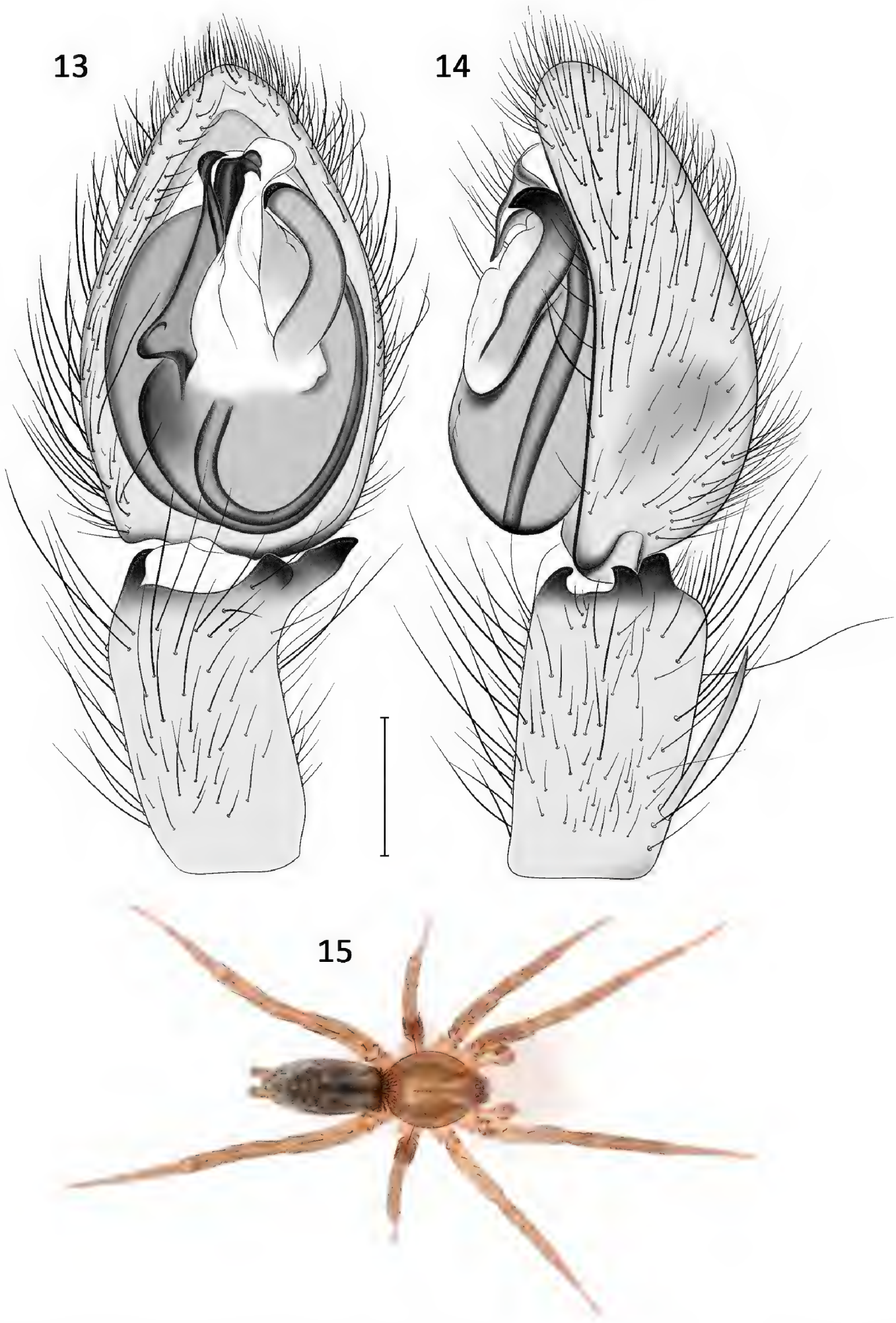
Material examined. GEORGIA • 2♂♂(1sub.); Kakheti, Dedoplistskaro mun., Chachuna MR, Dalis Mta Reservoir; N41.2804°, E45.8968°; semidesert, under rocks; leg. Seropian A; 19 May 2024; CaBOL-IDs 1037856, 1037857.

Comments. This species is known from Astrakhanskaya Oblast of Russia, Caucasus (Azerbaijan, Dagestan), Pakistan or India, and China (Nentwig et al. 2024; WSC 2024). It is the first record of *T. involutus* in Georgia.

****Genus *Turkozelotes* Kovblyuk & Seyyar, 2009**

Type species. *Turkozelotes microb* Kovblyuk & Seyyar, 2009.

Comments. *Turkozelotes* is a small genus of small-sized ground spiders with six accepted species distributed in the West Palaearctic and most diversified in the Mediterranean region (WSC 2024). Until recently, no congeners were reported from the Caucasus region.



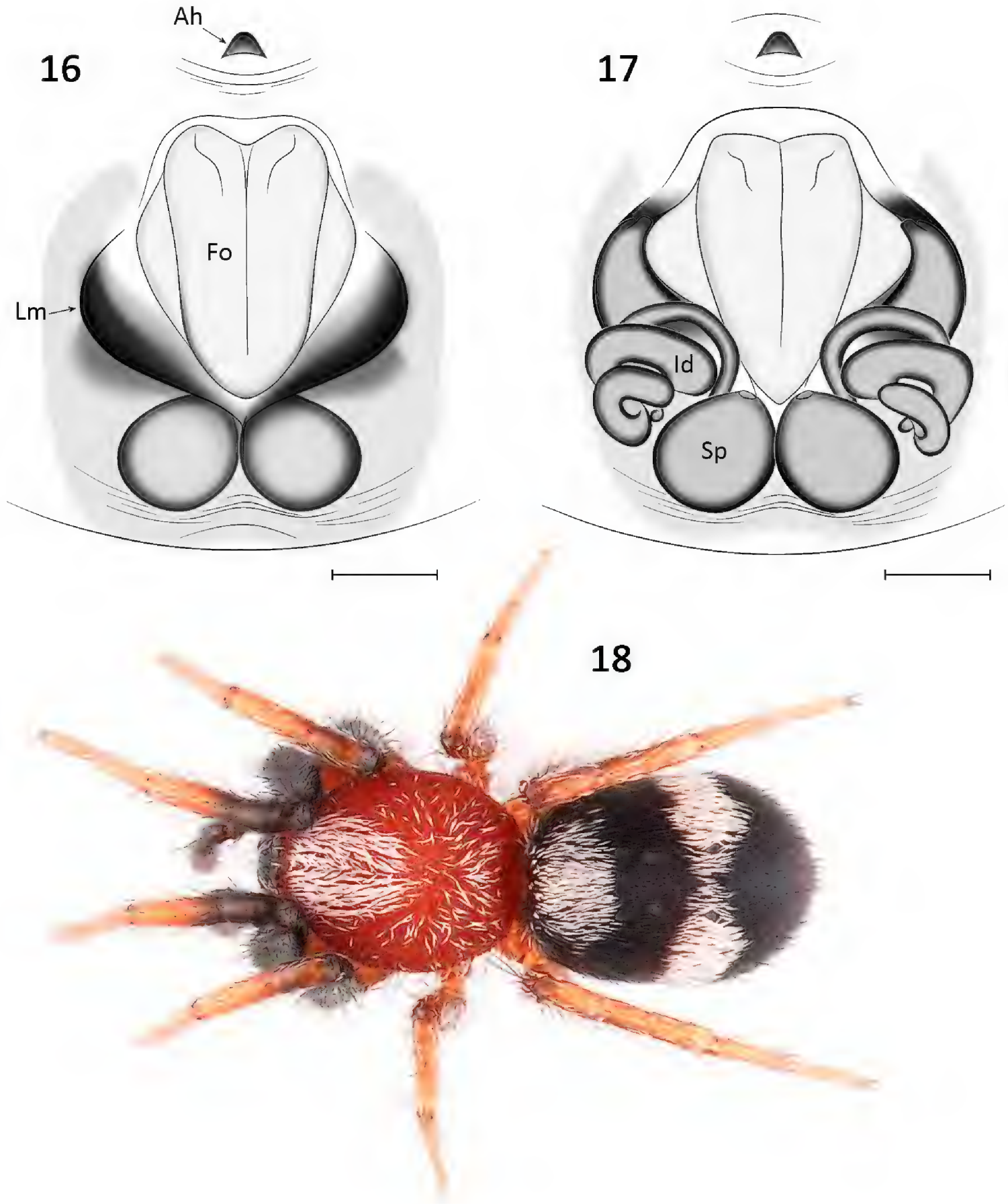
Figures 13–15. *Talanites involutus*, male (**13**: male, left palp, ventral view; **14**: ditto, retrolateral view; **15**: habitus of live specimen from Dalis Mta Reservoir;). Scale bar: 0.2 mm.

****Turkozelotes attavirus Chatzaki, 2019**

Figs 16–18

Turkozelotes attavirus: Chatzaki and Van Keer 2019: 451, figs 50–51, 56–57 (♂♀).

Comments. Since, in our opinion, the female description by Chatzaki and Van Keer (2019) lacks several notable features, we decided to describe the females from Georgia.



Figures 16–18. *Turkozelotes attavirus*, female (**16**: epigyne, ventral view; **17**: endogyne, dorsal view; **18**: habitus of live female). Abbreviations: Ah – anterior hood, Fo – fovea, Id – insemination duct, Lm – lateral margin, Sp – spermathecae. Scale bars: 0.2 mm.

Material examined. GEORGIA • 2♀♀; Kakheti, Vashlovani NP; Mijniskure; N41.1245°, E46.6456°; semidesert, under rocks; leg. A. Seropian; 22 May 2024; CaBOL-IDs 1038314, 1038315.

Description. Female. Habitus as in Fig. 18. Total length 3.56. Carapace 1.51 long, 1.17 wide, scarlet, strongly wrinkled; pars cephalica with patch of white setae, pars thoracica with irregular white setae. Sternum 1.41 long, 1.08 wide, orange, with dark margins. Abdomen 2.07 long, 1.37 wide. Chelicerae scarlet, with 2 pro- and 1 retromarginal teeth. Labium and maxillae yellow-orange, maxillae apically lightened. Palps yellow-grey, with two-toothed claws. Legs: I – Fe, Pt – dark brown, Ti – orange, darkened basally, Mt, Ta – yellow; II – Fe – dark brown, Pt – brown, darkened basally, Ti, Mt, Ta – yellow; III, IV – Fe – brown, Pt – yellow, darkened basally, Ti, Mt, Ta - yellow. Coxae light brown, II–IV – yellow.

Abdomen black, in the middle with two lateral overlapping white subcircular patches and an oval transverse white patch at the posterior end; pattern velvet ant-like: not preserved in the specimens from Rhodes, also, several white setae can still be seen on the posterior and lateral grey abdominal markings of the holotype male specimen (Chatzaki and Van Keer 2019: 451, fig. 50): Spinnerets grey. Legs spineless. Leg measurements [total length (Fe+Pa+Ti+Mt+Ta)]: I 2.85 (0.89+0.38+0.62+0.47+0.49), II 2.38 (0.78+0.32+0.53+0.31+0.44), III 2.15 (0.64+0.29+0.44+0.37+0.41), IV 3.05 (0.84+0.36+0.67+0.65+0.53). Mt III–IV with strong preening comb. Ta with two-toothed claws, without claw tufts or tenent hair. Eyes round, PE row straight. PME and AME almost touching, PME separated by 1.3 of their diameter. Ocular area behind AE black. Eyes: AME 0.051, ALE 0.049, PME 0.045, PLE 0.049.

Epigyne and endogyne as in Figs 16–17. Epigyne 1.1 times longer than wide; fovea (Fo) kite-shaped, almost twice as long as wide, with thin median furrow and S-shaped posterior lateral depressions; anterior hood (Ah) ≈7 times thinner than fovea; spermathecae (Sp) large, oval, touching each other, with anterior glands; insemination ducts (Id) forming 3 loops, forming anterior pouches, slightly extending beyond lateral margins (Lm).

Habitat. Two females were individually collected under rocks at the base of hills in the semidesert of Mijniskure, Vashlovani NP (Figs 51–52).

Distribution. Previously known from the type locality (Rhodes) only (WSC 2024). It is the first record of *Turkozelotes* and this remarkable velvet ant-like species from the Caucasus. Additionally, Marusik et al. (2004) depict two unidentified specimens (*Gnaphosidae* gen. sp.1) from Azerbaijan with "...very peculiar coloration resembling that of velvet ants (Mutillidae)." (138, figs 7–8), which presumably belong to the same species as the females from Mijniskure.

Notes. Several spider species have been known to mimic the velvet ants, from which at least two gnaphosids, namely *Zelotes albobivittatus* (Strand, 1906) and *Titus lugens* O. Pickard-Cambridge, 1901, are known to be mimics (although the first one is nomen dubium) (Nentwig 1985). Unfortunately, the striking velvet ant-like pattern of *T. attavirus* was not preserved in the specimens from Rhodes, also, several white setae can still be seen on the posterior and lateral grey abdominal markings of the holotype male specimen (Chatzaki and Van Keer 2019: 451, fig. 50). We should also mention the abundance and diversity of the potential models (velvet ants) observed at the type locality during the day.

Family Lycosidae Sundevall, 1833

Genus *Lycosa* Sundevall, 1833

Comments. Spiders of the genus *Lycosa* are relatively large and fossorial, with 220 recognized species distributed worldwide. The highest species diversity is found in Asia and South America (WSC 2024). Three species, namely *L. piochardi* Simon, 1876, *L. praegrandis* C. L. Koch, 1836, and *L. singoriensis* (Laxmann, 1770), were recorded in the Caucasus, although the record of the first is doubtful. Below, we provide the first record and the description of the male *L. soboutii* Shafaie, Nadolny & Mirshamsi, 2022 in the Caucasus, the species recently described from Iran based on a couple of females.

****_Lycosa soboutii_ Shafaie, Nadolny & Mirshamsi, 2022**
Figs 19–24

Lycosa soboutii: Shafaie et al. 2022: 502, figs 1–7 (♀).
Lycosa soboutii: Logunov 2023: 505, figs 145–148 (♀).

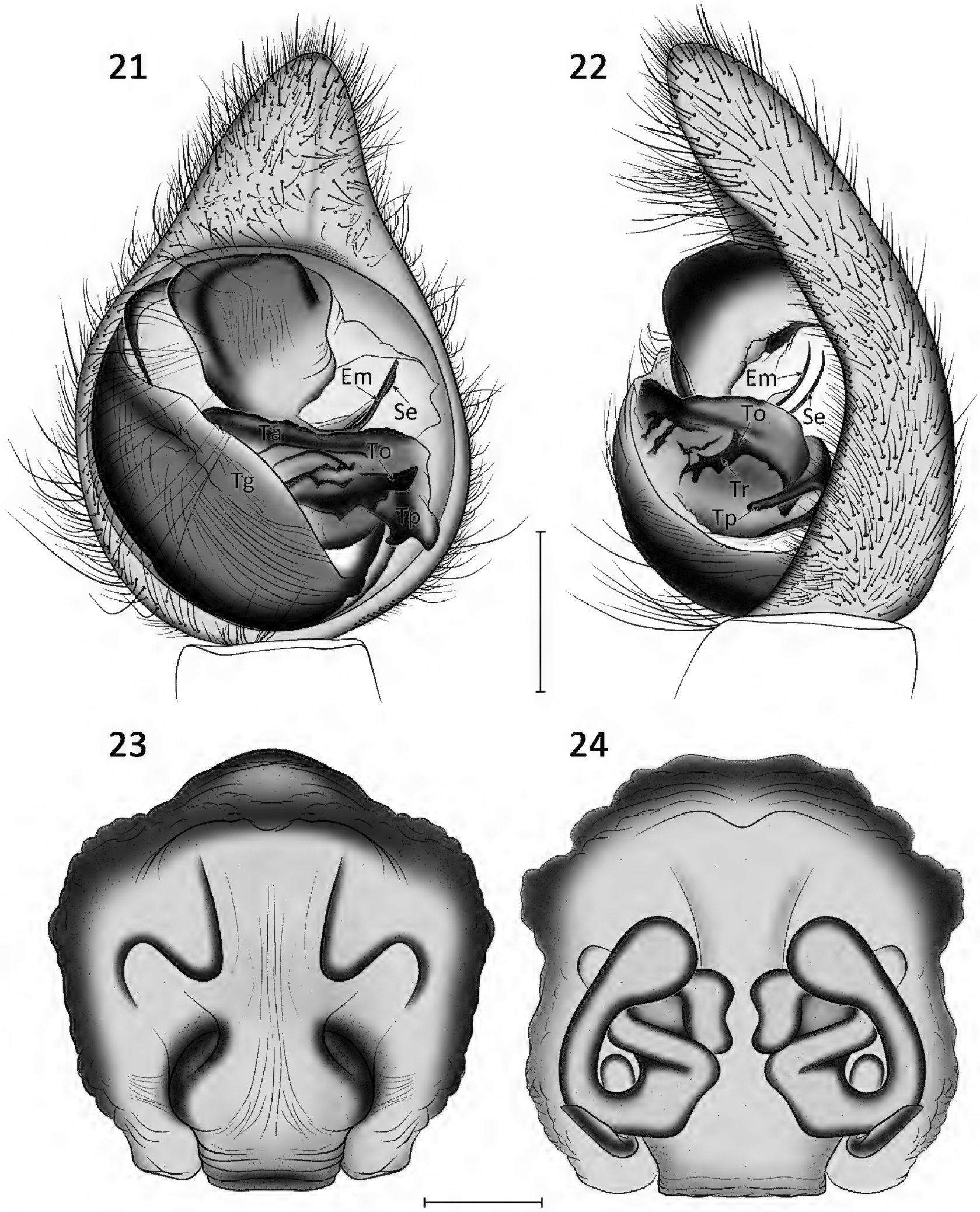
Material examined. GEORGIA • 3♂♂, 4♀♀; Kakheti, Dedoplistskaro mun., Chachuna MR, Osiaskheoba; N41.2314°, E46.1473°; semidesert, at night with flashlight; leg. Makharadze G, Seropian A; 19 May 2024; CaBOL-IDs 1038296, 1038298, 1038073, 1038297, 1038299, 1038074, 1038075. • 1♀; Kakheti, Vashlovani NP, Datviskhevi; N41.2382°, E46.3637°; semidesert, lured from burrow; leg. Bulbulashvili N; 20 May 2024; CaBOL-ID 1038300. • 1♀; Kakheti, Mijniskure; N41.1245°, E46.6456°; semidesert, at night with flashlight; leg. Makharadze G; 22 May 2024; CaBOL-ID 1038062. The material is deposited in the scientific collections of Ilia State University, Georgia, Tbilisi.

Diagnosis. In having extra processes of the tegular apophysis, the males of *L. soboutii* are most similar to those of *L. elymaisa* Zamani et Nadolny, 2022 and *L. aragogi* Nadolny et Zamani, 2017 from Iran, from which it can be easily distinguished by the less curved tegulum (Tg) [vs strongly curved in *L. elymaisa* (Zamani et al. 2022: figs 3E, 4A–B) and *L. aragogi* (Logunov 2023: figs 129, 131)], strongly pronounced sclerotized tegular ridge (Tr), more closely located embolus (Em) and synembolus (Se) [vs more diverged in *L. elymaisa* (Zamani et al. 2022: figs 3H–E, 4A–B) and *L. aragogi* (Logunov 2023: fig. 135)], proximally located ventral outgrowth of tegular apophysis (To) [vs distally located in *L. elymaisa* (Zamani et al. 2022: figs 3G–H, 4A, C) and *L. aragogi* (Logunov 2023: figs 129–132)], and bifid distal process of tegular apophysis (Tp) directed ventro-posteriorly [vs spiral-shaped in *L. elymaisa* (Zamani et al. 2022: figs 3G–I, 4A–D) and claw-shaped apically directed in *L. aragogi* (Logunov 2023: figs 129–132)].

Description. Male. Total length 13.87. Carapace 7.49 long, 5.41 wide. Carapace light reddish brown, covered with dense off-white setae and medially radi-

Figures 19–20. *Lycosa soboutii*, live specimens (**19**: female from Osiaskheoba, dorsal view; **20**: male from Osiaskheoba, dorsal view).

ating darker bands (Fig. 20); pars thoracica 1.6 times wider than pars cephalica; pars cephalica elevated. Chelicerae brown, with 3 pro- and 3 retromarginal teeth, with dense light-yellow setae, covering ca. ½ of cheliceral length. Labium and maxillae light-brown. Sternum black, covered with black and yellow setae. Abdomen yellow, dorsally with light trident-shaped mark margined with black setae.



Figures 21–24. *Lycosa soboutii* (**21**: male, left palp, ventral view; **22**: ditto, retrolateral view; **23**: female, epigyne, ventral view; **24**: endogyne, dorsal). Abbreviations: Em – embolus, Se – synembolus, Ta – tegular apophysis, Tg – tegulum, To – ventral outgrowth of tegular apophysis, Tp – distal process of tegular apophysis, Tr – tegular ridge. Scale bars: 0.5 mm.

Spinnerets yellowish, apically darkened. All legs covered with dense off-white setae (Fig. 20): Tr, Ti, Pa light-yellow; Tr ventrally with black setae; Ta and Mt I–II brown, Ta and Mt III–IV yellow; venter of Pa I–IV apically, and Ti I–IV apically and basally darkened. Leg measurements: I 21.97 (6.05+2.58+5.47+5.41+2.46), II 20.04 (5.69+2.35+4.79+4.59+2.62), III 19.58 (5.57+2.14+3.57+5.52+2.78), IV 25.92 (7.21+2.34+5.25+7.87+3.25). Palps yellowish, with brown bulb, covered with off-white setae. Palpal structure as in Figs 21–22: cymbium 1.5 times longer than wide, apex with 8–9 strong bristles; bulb slightly (≈1.1 times) wider than long; embolic division bares thin, long, and curved embolus, with well-developed pars pendula and embolus-like thin synembolus (Se).

Female. See Shafaie et al. (2022). The shape of the epigyne and the endogyne of the females from Georgia (Figs 23–24) leave no doubt in its identification as *L. soboutii*, recently described from Zanjan Province in Iran. Interestingly, the black spot entirely covering the venter of the holotype female's abdomen (Shafaie et al. 2022, fig. 2) varied in our specimens, sometimes extending only to half of the surface.

Distribution. Iran (WSC 2024), Georgia (present study). This is the first record from the Caucasus region.

Comments: At the time of capture, all specimens were in the subadult stages and then captive-reared during May.

Family Oecobiidae Blackwall, 1862

Genus *Oecobius* Lucas, 1846

Oecobius maculatus Simon, 1870

Oecobius maculatus: Wunderlich 1995a: 594, figs 12, 29–30, 30a–b

Material examined. GEORGIA • 1♂, 3♀♀; Kakheti, Dedoplistskaro mun., Chachuna MR, Dalis Mta Reservoir; N41.2804°, E45.8968°; semidesert, under rocks; leg. Makharadze G, Seropian A; 19 May 2024; CaBOL-IDs 1038125, 1038126, 1038127, 1038128.

Comments. This species is distributed from the Mediterranean to Azerbaijan, and has been introduced to the USA and Mexico (WSC 2024). *Oecobius maculatus* was recently recorded in Georgia from the Kvemo Kartli region (Seropian et al. 2023). It is the first record of this species in the Kakheti region.

Family Philodromidae Thorell, 1869

Genus *Rhysodromus* Schick, 1965

Comments. *Rhysodromus* is a relatively large genus with 27 valid species generally distributed in the Palaearctic, the majority of which were previously classified under *Philodromus* Walckenaer, 1826 (WSC 2024) (see Szita and Logunov (2008) for diagnosis). Seven species, namely *R. fallax* (Sundevall, 1833), *R. histrio* (Latreille, 1819), *R. lepidus* (Blackwall, 1870), *R. naxcivanicus* (Logunov & Huseynov, 2008), *R. rikhteri* (Logunov & Huseynov, 2008), *R. timidus* (Szita & Logunov, 2008), and *R. xinjiangensis* (Tang & Song, 1987) have been recorded in the Caucasus.

***Rhysodromus rikhteri* (Logunov & Huseynov, 2008)**
Fig. 25

Philodromus rikhteri Logunov and Huseynov 2008: 129, figs 11–13, 16–18 (♀).
Rhysodromus rikhteri: Khasayeva and Huseynov 2019: 357, figs 5–6 (♀).

Material examined. GEORGIA • 1♀; Kakheti, Dedoplistskaro mun., Chachuna MR; Osiaskheoba; N41.2314°, E46.1473°; semidesert, *Tamarix* sp.; leg. Seropian A; 20 May 2024; CaBOL-ID 1037865. • 1♀; Kvemo Kartli, Gardabani mun., Kumisi Lake; N41.5768°, E44.8172°; steppe, *Tamarix* sp.; leg. Seropian A; 22 Apr. 2024; CaBOL-ID 1037864.

Comments. This species is known solely by females and was recorded in Armenia and Azerbaijan (Nentwig et al. 2024; WSC 2024). From other species in the *histrio* group, it can be easily distinguished by a dense transverse brush of bristles in front of spinnerets (Logunov and Huseynov 2008, figs 17–18). It is the first record of *R. rikhteri* in Georgia.

**Family Prodidomidae Simon, 1884

****Genus *Prodidomus* Hentz, 1847**

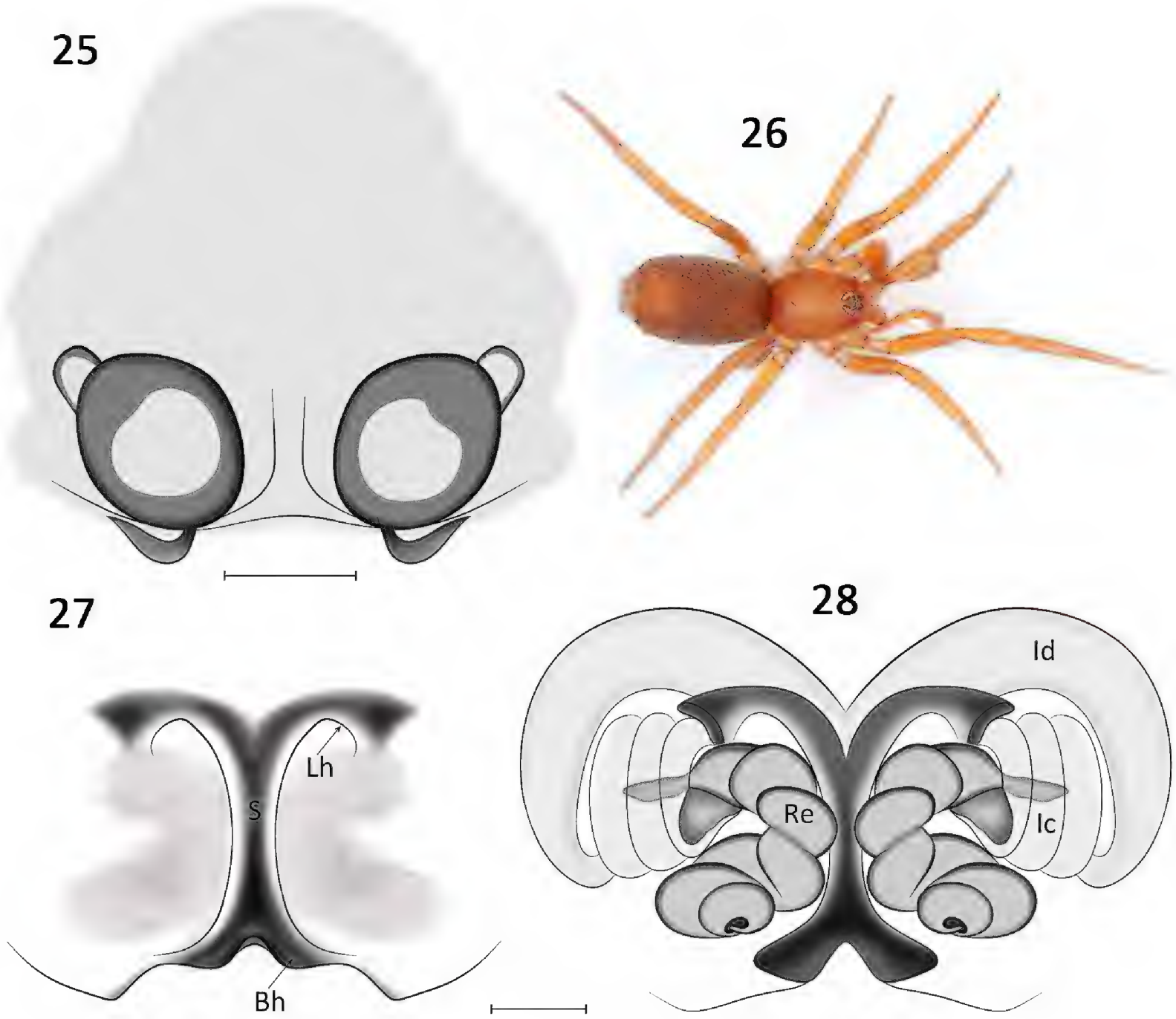
Comments. *Prodidomus* is the largest genus in this gnaphosoid family, accounting for 53 valid species, originally distributed in Palaearctic, Afrotopic, Indomalaya, and Australasia (*P. rufus* Hentz, 1847, introduced to the Americas) (WSC 2024). *A* single species, *P.* cf. *redikorzevi* sensu Marusik, 2009, occurs in the Caucasus (Azerbaijan) (Marusik 2009).

***Prodidomus trihelicoides* sp. nov.**
https://zoobank.org/B8E54C5C-6FE8-4675-924A-10188C6F383B
Figs 26–28

Type material. Holotype. ♀ (CaBOL-ID 1037720); Georgia, Kakheti, Dedoplistskaro mun., Chachuna MR, Osiaskheoba; N41.2314°, E46.1473°; semidesert, in soil cracks; 20 May 2024; leg. Bulbulashvili N. Paratype. ♀ (CaBOL-ID 1037833); Georgia, Kakheti, Vashlovani NP, Mijniskure; N41.1245°, E46.6456°; semidesert, under rocks; 22 May 2024; leg. Makharadze G. Both specimens are deposited in the scientific collections of ISU.

Diagnosis. The new species resembles *P. redikorzevi* Spassky, 1940 (Marusik 2009: figs 1–4, 6; Kunt et al. 2012: figs 9a-e), from which it can be distinguished by transparent insemination ducts (Id) with three coils (vs. five coils) (Fig. 28).

Description. Female (holotype/paratype). Total length 3.46/4.44. Carapace ovoid, 1.46/1.50 long, 1.18/1.23 wide. Sternum 1.16/1.11 long, 0.82/0.85 wide. Carapace, sternum, labium, chelicerae, and maxillae orange, without any pattern, covered with light yellow setae. Abdomen light yellow-orange without any pattern, dorsally covered with light yellow setae and dark brown setae posteriorly. Ocular area triangular. Chelicerae without teeth. Legs the same color as carapace, without annulations. Eyes: AME 0.12/0.13, ALE 0.11/0.12, PME 0.14/0.15, PLE 0.13/0.14. Leg measurements: I 4.67/4.76 (1.16/1.18+0.93/0.



Figures 25–28. *Rhysodromus rikhteri*, female (**25**: endogyne, dorsal view). *Prodidomus trihelicoies* **sp. nov.**, holotype, ♀ (**26**: general habitus of live holotype female from Osiaskheoba; **27**: epigyne, ventral view; **28**: endogyne, dorsal view). Abbreviations: B – basal hood, Ic – insemination coils, Id – insemination duct, Lh – lateral hood, S – septum, Re – receptacula. Scale bars: 0.1 mm.

94+0.98/1.01+0.84/0.85+0.76/0.78), II 3.89/4.02 (0.96/0.98+0.74/0.77+0.84/0.86+0.69/0.73+0.66/0.68), III 3.41/3.53 (0.88/0.91+0.62/0.65+0.71/0.73+0.61/0.63+0.59/0.61), IV 4.25/4.33 (0.85/0.87+0.79/0.81+1.28/1.30+0.71/0.72+0.62/0.63). Epigyne and endogyne as in Figs 27–28: septum (S) with a pair of apical hoods (Lh) (insemination duct openings) and unpaired well-sclerotized basal hood (Bh); insemination ducts (Id) wide, long, and transparent, forming a single wide loop at the entrance, then forming three closely located smaller coils (Ic); receptacula (Re) >-shaped, divided into several chambers.

Male. Unknown.

Etymology. The specific epithet is an adjective referring to the three coils of insemination ducts.

Habitat. Two females were collected in soil cracks and under rocks in semi-deserts of Chachuna MR and Vashlovani NP (Figs 49–52).

Distribution. Known from two localities in Georgia only.

Comments. In his paper, Al-Khazali (2021) depicts a *Prodidomus* female from Iraq with three insemination duct coils, probably belonging to the here-in-described species, and erroneously assigns it to *P. redikorzevi*. Moreover, *P.*

trihelicoides sp. nov. and females from Iraq may belong to the species recently described by a male from Iran - *P. inexpectatus* Zamani, Chatzaki, Esyunin & Marusik, 2021 (Zamani et al. 2021). Until proven otherwise, we consider *P. trihelicoides* sp. nov. a separate species.

Family Salticidae Blackwall, 1841

Genus *Aelurillus* Simon, 1885

Comments. *Aelurillus* is a large genus with 75 valid species mainly distributed in the Palaearctic, with only ten species being recorded from outside its limits (WSC 2024). Four species, namely *A. concolor* Kulczyński, 1901, *A. lutosus* (Tystshenko, 1965), *A. m-nigrum* Kulczyński, 1891, and *A. v-insignitus* (Clerck, 1757), have been recorded in the Caucasus.

Aelurillus concolor Kulczyński, 1901

Aelurillus concolor: Ponomarev et al. 2019: 323, fig. 23 (♂).

Material examined. GEORGIAi • 1 ♂; Kakheti, Dedoplistksaro mun., Vashlovani NP; Mijniskure; N41.1245°, E46.6456°; semidesert; leg. Makharadze G; 22 May 2024; CaBOL-ID 1037400.

Comments. This species is distributed from Greece to Central Asia (WSC 2024). In Georgia, it was recorded from several localities previously (Seropian et al. 2023). It is the first record of *A. concolor* in Vashlovani NP.

Genus *Chalcoscirtus* Bertkau, 1880

Comments. *Chalcoscirtus* is a large genus of small-sized jumping spiders with 46 valid species with a Holarctic distribution (WSC 2024). Four species, namely *C. infimus* (Simon, 1868), *C. nigritus* (Thorell, 1875), *C. pseudoinfimus* Ovtsharenko, 1978, and *C. tanasevichi* Marusik, 1991, have been recorded in the Caucasus.

Chalcoscirtus tanasevichi Marusik, 1991

Chalcoscirtus tanasevichi: Logunov and Marusik 1999: 218, figs 49–50 (♂).
Chalcoscirtus tanasevichi: Seropian et al. 2023: 272, fig. 95 (♂).

Material examined. GEORGIA • 1 ♂; Kakheti, Dedoplistskaro mun., Chachuna MR, Dalis Mta Reservoir; N41.2804°, E45.8968°; semidesert; leg. Seropian A; 19 May 2024; CaBOL-ID 1037713.

Comments. This species is distributed from Turkey to Central Asia (Nentwig et al. 2024; WSC 2024). Recently, it was recorded for the first time in Georgia (Seropian et al. 2023). It is the first record of *C. tanasevichi* in the Chachuna MR.

Genus *Evarcha* Simon, 1902

Comments. *Evarcha* is a large genus with 94 valid species mainly distributed in the Holarctic, Oriental, and Afrotopical regions (for diagnosis, see Rakov 1997). Five species, namely *E. arcuata* (Clerck, 1757), *E. armeniaca* Logunov, 1999, *E. falcata* (Clerck, 1757), *E. laetabunda* (C. L. Koch, 1846), and *E. michailovi* Logunov, 1992, have been recorded in the Caucasus (WSC 2024).

**Evarcha armeniaca* Logunov, 1999

Figs 29–40

Evarcha armeniaca Logunov, 1999b: 301, figs 1–4 (♂♀).

Material examined. GEORGIA • 3♂♂, 3♀♀; Kakheti, Dedoplistksaro mun., Vashlovani NP; Mijniskure; N41.1245°, E46.6456°; semidesert; leg. Bulbulashvili N, Makharadze G; 22 May 2024; CaBOL-IDs 1037663, 1037397, 1037398, 1037664, 1038129, 1038115.

Comments. This species was described from Armenia and Azerbaijan (Logunov 1999) and then recorded in Turkey (WSC 2024). It is the first record of *E. armeniaca* in Georgia, and the northernmost one.

Family Theridiidae Sundevall, 1833

**Genus *Sardinidion* Wunderlich, 1995

Comments. A monotypic genus with a single species previously classified under *Theridion* Walckenaer, 1805, and distributed in the Western Palaearctic (WSC 2024). For diagnosis, see Wunderlich (1995b).

Sardinidion blackwalli (O. Pickard-Cambridge, 1871)

Figs 41

Sardinidion perplexum: Wunderlich 1995b: 688, figs 1–7 (♂)

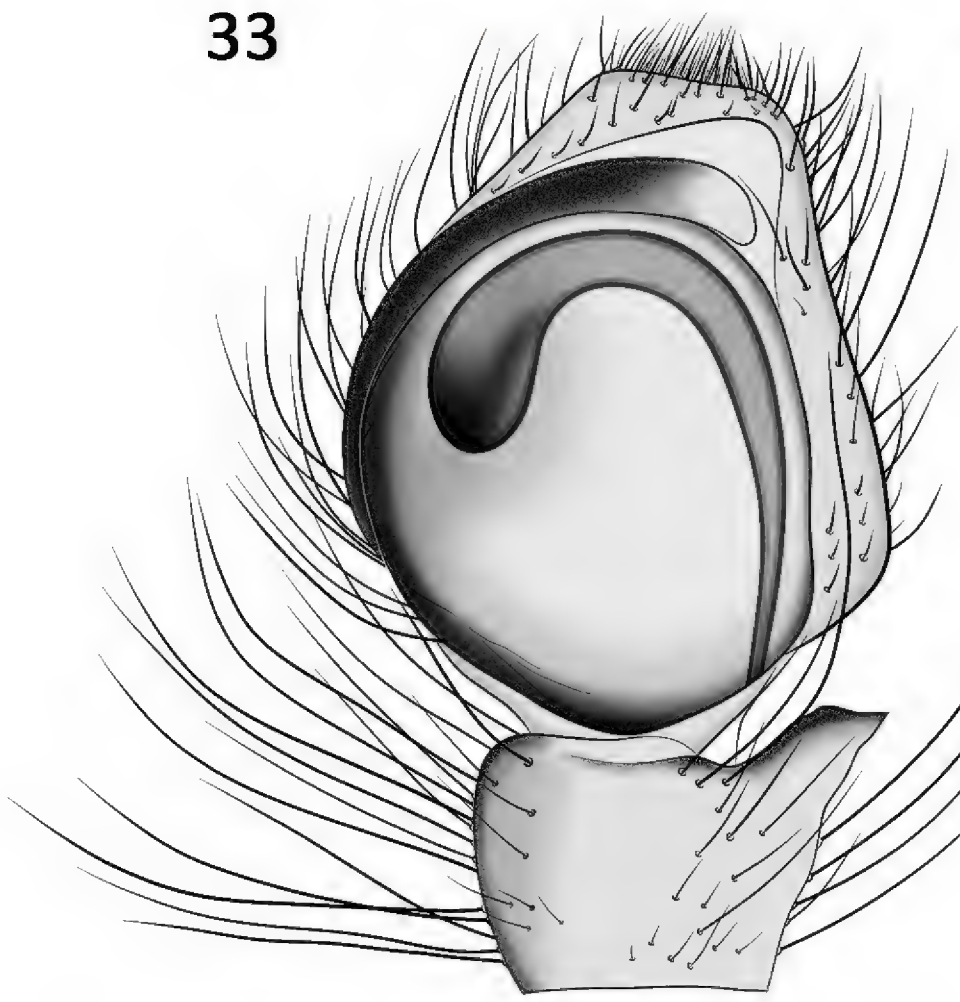
Material examined. GEORGIA • 1♂; Kakheti, Dedoplistksaro mun., Vashlovani NP; Datviskhevi; N41.2361°, E46.3709°; semidesert; leg. Seropian A; 20 May 2024; CaBOL-ID 1038179.

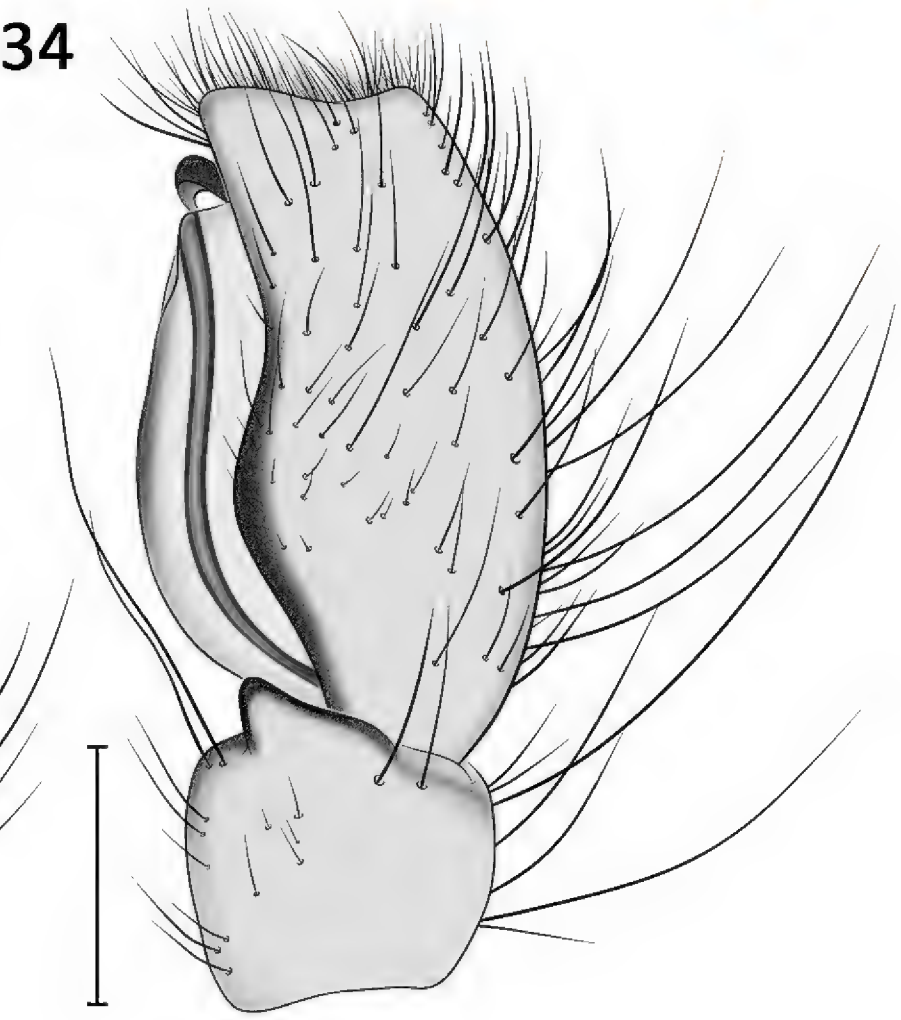
Comments. This species is distributed from the Eastern Mediterranean to eastern European Russia (WSC 2024). It is the first record of *Sardinidion* in the Caucasus.

Genus *Steatoda* Sundevall, 1833

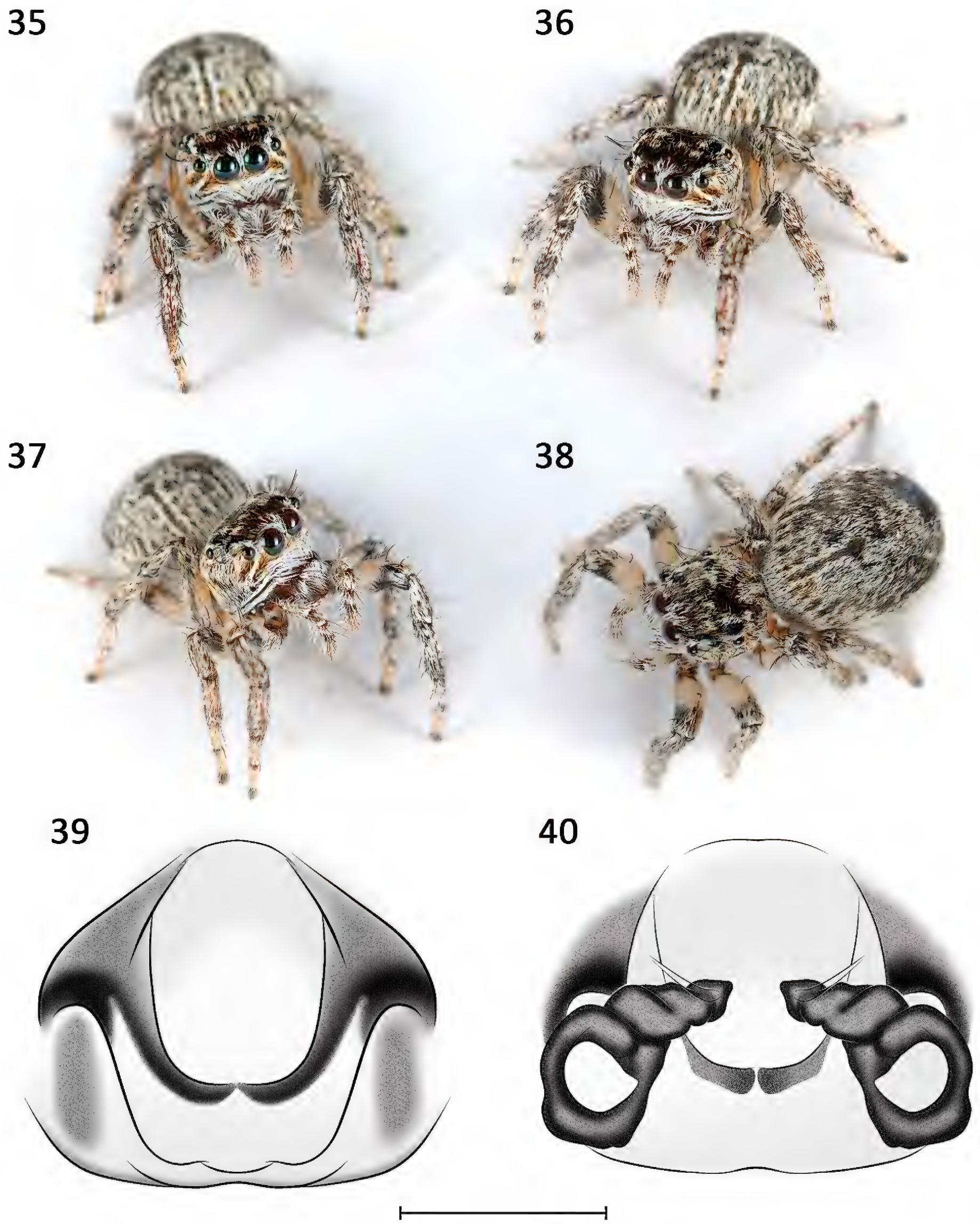
Steatoda albomaculata (De Geer, 1778)

Material examined. GEORGIA • 1♀; Kakheti, Dedoplistskaro mun., Chachuna MR, Dalis Mta Reservoir; N41.2804°, E45.8968°; semidesert; leg. Seropian A; 19 May 2024; CaBOL-ID 1038158.





Figures 29–34. *Evarcha armeniaca*, male (**29**: live specimen from Mijniskure; **30**, **31**, **32**: ditto; **33**: left palp, ventral view; **34**: ditto, retrolateral view). Scale bar: 0.2 mm.



Figures 35–40. *Evarcha armeniaca*, female (**35**: live specimen from Mijniskure; **36**, **37**, **38**: ditto; **39**: epigyne, ventral view; **40**: endogyne, dorsal view). Scale bar: 0.2 mm.

Comments. Species with Holarctic distribution (WSC 2024). It is the first record of *S. albomaculata* in the Kakheti region (Otto 2022).

Genus *Coscinida* Simon, 1895

Comments. *Coscinida* is a relatively small genus with 18 valid species mainly distributed in Africa, East, and South Asia (WSC 2024). A single species, *C. tibialis* Simon, 1895, was recently recorded in Georgia and the Caucasus for the first time (Seropian et al. 2023).

Coscinida tibialis Simon, 1895

Coscinida tibialis: Seropian et al. 2023: 280, fig. 119 (♀).

Material examined. GEORGIA • 1♀; Kakheti, Dedoplistksaro mun., Vashlovani NP; Datviskhevi; N41.2361°, E46.3709°; semidesert; leg. Seropian A; 20 May 2024; CaBOL-ID 1038179.

Comments. This is the southeasternmost record in Georgia and the first one in the Kakheti region.

Family Thomisidae Sundevall, 1833

Genus *Synema* Simon, 1864

Type species. *Aranea rotundata* Walckenaer, 1802

Comments. *Synema* is a large genus of brightly colored crab spiders with 126 valid species distributed on all continents except Australia (WSC 2024). Four species, namely *S. caucasicum* Utochkin, 1960, *S. globosum* (Fabricius, 1775), *S. ornatum* (Thorell, 1875), and *S. plorator* (O. Pickard-Cambridge, 1872), have been recorded in the Caucasus. Herein we describe a new species, *Synema inexpectata* **sp. nov.**, from SE Georgia.

Synema inexpectata sp. nov.

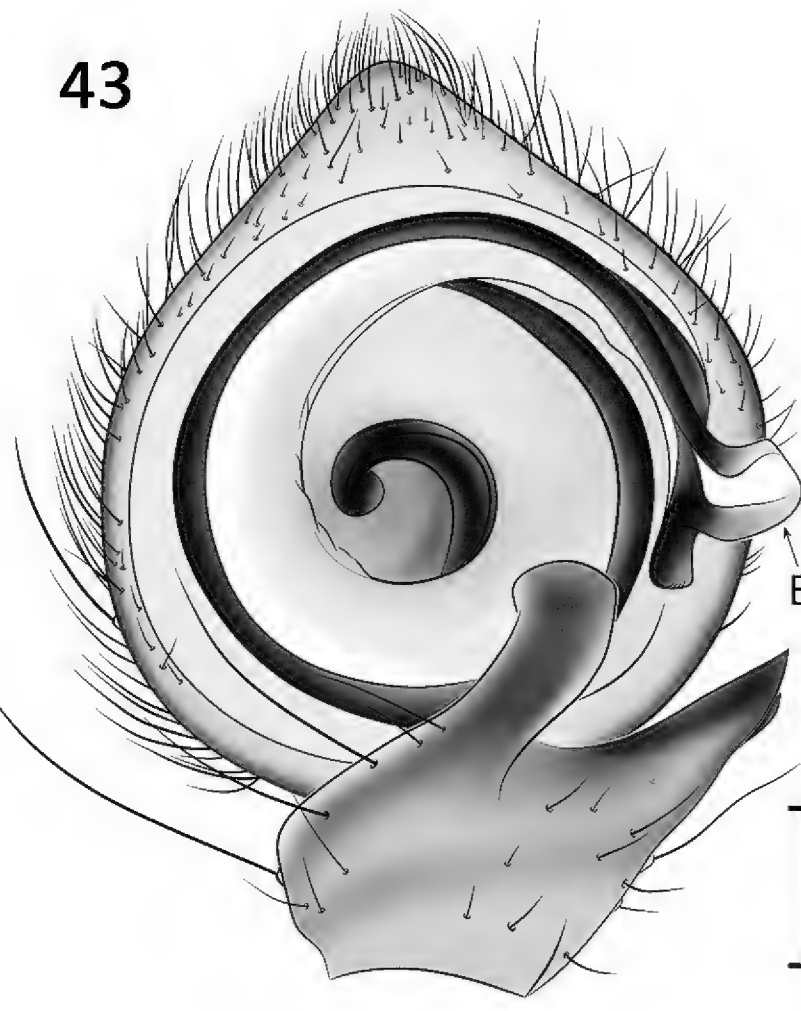
https://zoobank.org/C159F025-AC68-44AC-A668-9811B45E780D

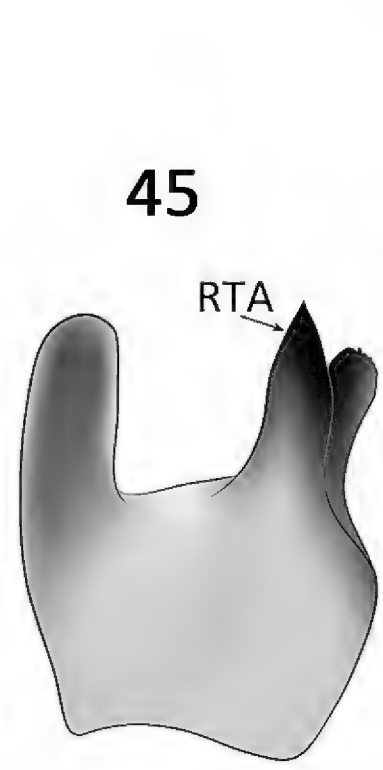
Figs 42–45

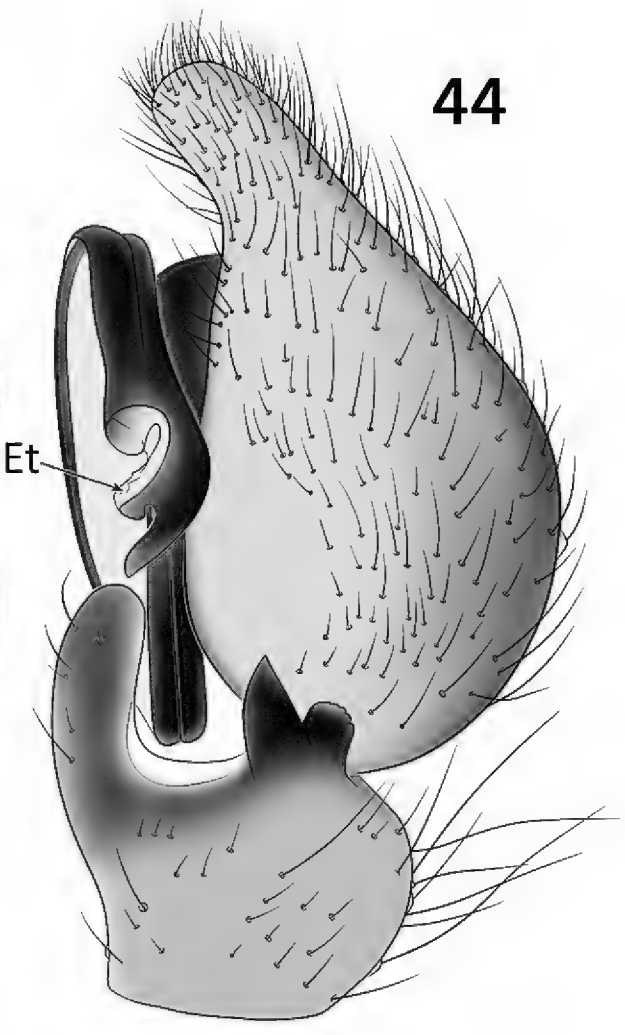
Type material. Holotype. ♂ (CaBOL-ID 1038144): Georgia: Kakheti, Dedoplistskaro mun., Chachuna MR, Osiaskheoba; N41.2314°, E46.1473°; semidesert, vegetation; 20 May 2024; leg. Makharadze G; Type specimen is deposited in the scientific collections of Ilia State University, Georgia, Tbilisi.

Diagnosis. The new species resembles *S. utotchkini* Marusik & Logunov, 1995 (Marusik and Logunov 1995: 142, figs 12–13; Fomichev 2022: 231, figs 42–44) by a strongly modified embolus tip and bifurcated retrolateral apophysis (RTA). The male of the new species can be distinguished from that of *S. utotchkini* by having a longer embolus with a strongly modified, wide embolic tip (Et) originating at 3 o'clock (vs. originating at 2 o'clock), and differently shaped retrolateral tibial apohysis (RTA) (Fig. 43)

Description. Male (holotype). Total length 3.82. Carapace 2.03 long, 2.08 wide. Abdomen 1.92 long, 1.79 wide. Cheliceral length 0.75. Eye measurements: AME 0.11, ALE 0.16, PME 0.08, PLE 0.09. Carapace dark-brown with lighter median part. Abdomen dorsally bright red (coloration dull in ethanol)







Figures 41–45. *Sardinidion blackwalli*, male (**41**: left palp, retrolateral view). *Synema inexpectata* **sp. nov.**, holotype, male (**42**: general habitus of holotype male from Osiaskheoba; **43**: left palp, ventral view; **44**: ditto, retrolateral view; **45**: retrolateral tibial apophysis, dorsal view). Abbreviations: Et – embolic tip, RTA – retrolateral tibial apophysis. Scale bars: 0.2 mm (41, 43–45); 1 mm (42).

with extensive black pattern (Fig. 42). Sternum uniformly brown. Spinnerets dark brown, branchial opercula light brown. Leg coloration: Fe, Pa, Ti, and Mt I–IV dark brown (Ti and Mt III-IV with yellowish basal parts), Ta I-IV dark yellow, apically darkened. Leg measurements [total length (Fe+Pa+Ti+Mt+Ta)]: I 6.63 (1.93+0.97+1.51+1.27+0.95), II 6.72 (2.11+0.78+1.72+1.3+0.81), III 4.71 (1.29+0.61+1.22+0.91+0.68), IV 4.31 (1.56+0.62+1.18+0.88+.062). Leg I spination: Fe d1-1-1-1, p1-1-1-1-1; Ti d1-1-1p, p1-1-1, v2–2–2–2ap; Mt d1-1-1, p1-1-1ap; r1-1-1ap, v2-2-2ap. Palpal structure as in Figs 43–44: cymbium 1.1 times longer than wide.

Female unknown.

Etymology. The specific epithet is an adjective and refers to the unexpected discovery of a new species of this genus in Georgia.

Habitat. A single male of the new species was individually collected from vegetation in semidesert (Fig. 49).

Distribution. Known from the type locality only.

Comments. During the fieldwork conducted by the CaBOL team in July 2023 on the territory of Chachuna MR, several new and interesting spiders were collected (Seropian et al. 2024), among which were many *Synema* sp. juveniles with red and yellow abdomens and consistent abdominal pattern, identical to the herein described species.

Family Titanoecidae Lehtinen, 1967

Genus *Titanoeca* Thorell, 1870

Comments. *Titanoeca* is the largest genus within the family, comprising 31 valid species mainly distributed in the Palaearctic, with only seven species being recorded from outside its limits. Seven species, namely *T. caspia* Ponomarev, 2020, *T. caucasica* Dunin, 1985, *T. nivalis* Simon, 1874, *T. schineri* L. Koch, 1872, *T. tristis* L. Koch, 1872, *T. ukrainica* Guryanova, 1992, and *T. veteranica* Herman, 1879, have been recorded in the Caucasus (WSC 2024).

Titanoeca caucasica Dunin, 1985

Titanoeca caucasica: Dunin 1985: 932, figs 1–8 (♂♀).
Titanoeca caucasica: Ponomarev and Shmatko 2023: 214, figs 18-24 (♂♀).

Material examined. GEORGIA • 2♀♀, 3♂♂; Kakheti, Dedoplistksaro mun., Vashlovani NP; Datviskhevi; N41.2361°, E46.3709°; semidesert; leg. Bulbulashvili N, Makharadze G; 20 May 2024; CaBOL-IDs 1037698, 1037700, 1037695, 1037699, 1037401.

Comments. This species is distributed in the Caucasus, Turkey, and Iran (WSC 2024). It was recently found in several localities in Georgia (Seropian et al. 2023). It is the first record of *T. caucasica* in Vashlovani NP and the southernmost one in Georgia.

Family Zodariidae Thorell, 1881

****Genus *Acanthinozodium* Denis, 1966**

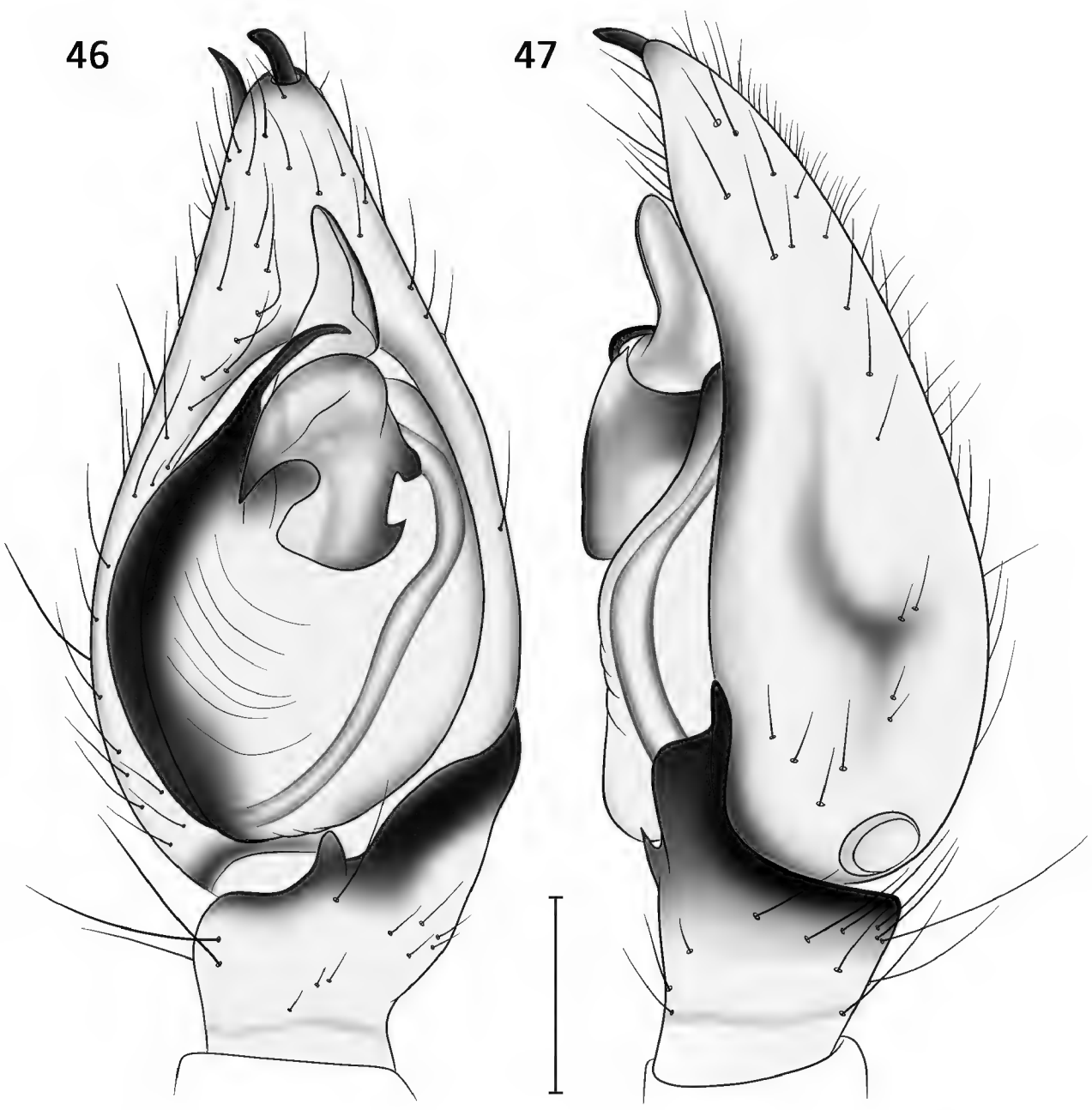
Comments. *Acanthinozodium* currently comprises 24 valid species, distributed in Iran, Central Turkmenistan, the Arabsphere, West Africa, and Cameroon. None of the species have been recorded in the Caucasus (WSC 2024). Males are distinguished from other Caucasian zodariids by having a unique gland in the conical pit at the base of the cymbium.

****_Acanthinozodium parysatis_ Zamani & Marusik, 2021**
Figs 46–47, 48

Acanthinozodium parysatis Zamani and Marusik 2021: 167, figs 11F, 13F–I, 15A–C (♂).

Material examined. GEORGIA • 1♂; Kakheti, Dedoplistskaro mun., Vashlovani NP; Mijniskure; N41.1245°, E46.6456°; semidesert, under rocks; leg. Seropian A; 22 May 2024; CaBOL-ID 1038313.

Comments. This species was previously known from the Ardabil and Qazvin Provinces of Iran only (Zamani and Marusik 2021). It is the first record of *Acan-*



Figures 46–47. *Acanthinozodium parysatis*, male (**46**: left palp, ventral view; **47**: ditto, retrolateral view). Scale bar: 0.1 mm.

Figures 48. *Acanthinozodium parysatis*, male, live specimen from Mijniskure, dorsal view.

thinozodium in the Caucasus region and the northernmost one of this species' known distribution.

Genus *Zodarion* Walckenaer, 1826

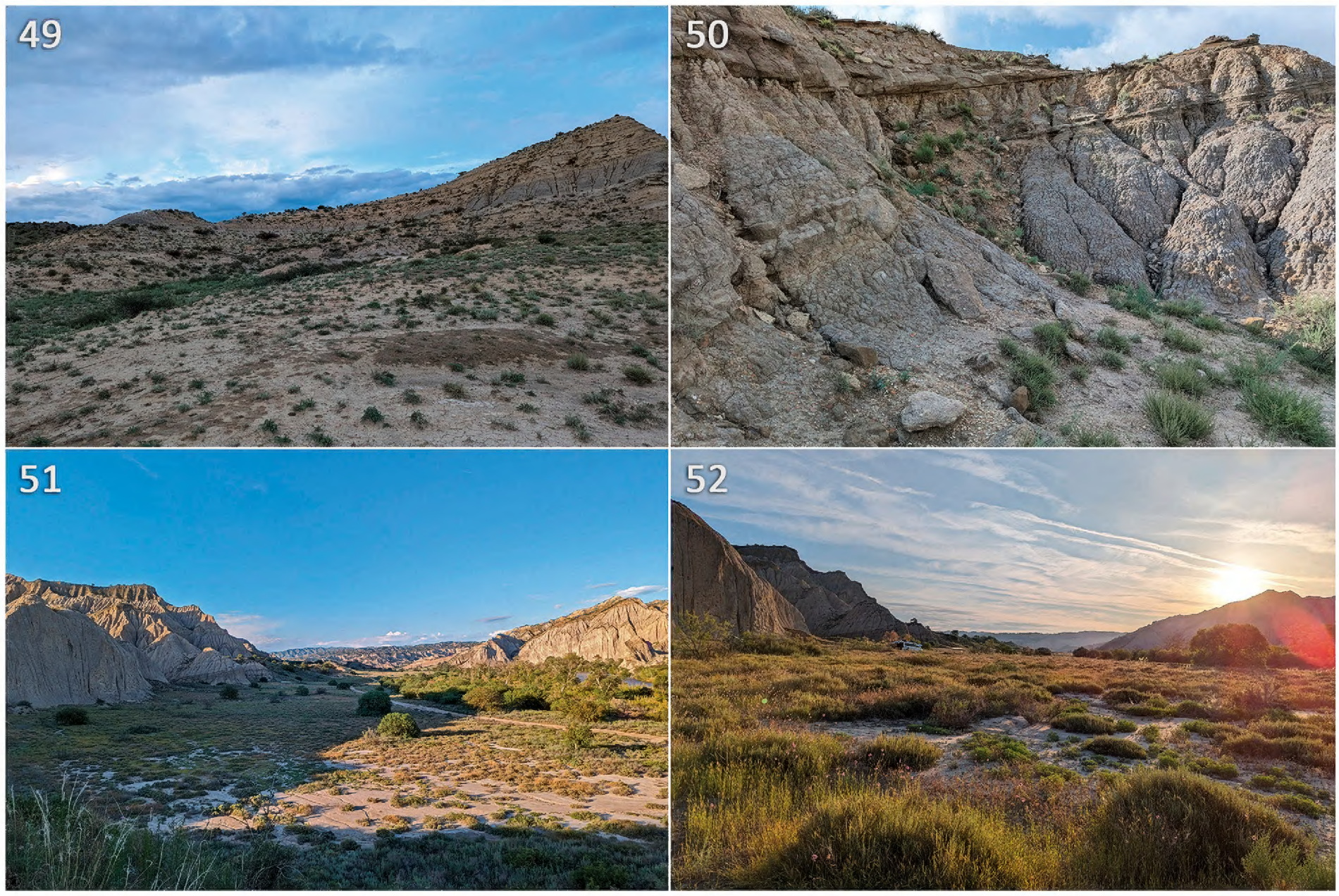
Comments. *Zodarion* is the largest genus within the family, comprising 171 valid species mainly distributed in the Palaearctic region. Eight species, namely *Z. abantense* Wunderlich, 1980, *Z. caucasicum* Dunin & Nenilin, 1987, *Z. italicum* (Canestrini, 1868), *Z. morosum* Denis, 1935, *Z. petrobium* Dunin & Zacharjan, 1991, *Z. rhodiense* Caporiacco, 1948, *Z. rubidum* Simon, 1914, and *Z. thoni* Nosek, 1905, have been recorded in the Caucasus (WSC 2024).

Zodarion rhodiense Caporiacco, 1948

Zodarion nigrifemur: Lecigne and Henrard 2022: 33, figs 4A–H, 5A (♂).
Zodarion nigrifemur: Seropian et al. 2023: 293, figs 138–140 (♂).
Zodarion rhodiense: Dimitrov 2024: 113, figs 4–9 (♂).

Material examined. GEORGIA • 1♂; Kakheti, Dedoplistksaro mun., Vashlovani NP; Mijniskure; N41.1245°, E46.6456°; semidesert; leg. Makharadze G; 22 May 2024; CaBOL-ID 1037399.

Comments. This species was recorded in Greece, Turkey, and recently from several localities in Georgia (WSC 2024; Seropian et al. 2023). It is the first record of *Z. rhodiense* in the Kakheti region and the easternmost one of this species' known distribution



Figures 49–52. Sampling localities; **49**: Chachuna MR, Osiaskheoba; **50**: ditto, microhabitat depicting muddy hills; **51**: Vashlovani NP, Mijniskure; **52**: ditto, specific sampled microhabitat.

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Additional information

Conflict of interest

The authors have declared that no competing interests exist.

Ethical statement

No ethical statement was reported.

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Author contributions

Conceptualization: AS. Material collection: AS, NB, GM. Methodology: AS. Material sorting and identification: AS GM. Data Curation: AS. Writing and drawing - original draft: AS. All authors read and approved the final draft of the manuscript.

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Data availability

All of the data that support the findings of this study are available in the main text or Supplementary Information.

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